

Agriculture and European Union Enlargement

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Background² and Scope of the Study

Agricultural policies throughout Europe have undergone fundamental changes in the 1990's due to internal and external pressures. In the European Union (EU), internal budget pressures generated by the Common Agricultural Policy (CAP) combined with external pressure imposed by the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) negotiations to force a radical reform of its agricultural policy in 1992. The Agreement on Agriculture in the Uruguay Round of the GATT negotiations, signed in April of 1994, combined with the eventual enlargement of the EU to include Central and Eastern European countries (CEEC's), will likely force the EU to further reform the CAP later in the decade to meet its GATT commitments in agriculture and stay within acceptable CAP expenditure limits.

An even more radical change in agricultural policy occurred in many CEEC's when central planning was, in most cases, replaced by moves of varying degrees to a more market-driven agricultural economy. Production and consumption declined dramatically as subsidies were reduced or eliminated. To the extent that production can respond to the new market signals faster than consumption, the near future holds potential for surplus production and higher levels of exports from the CEEC's. Such a scenario is even more likely and would occur even sooner if the CEEC's, in anticipation of EU membership, adopt CAP policies and the associated higher guaranteed prices.

Three former members of the European Free Trade Association (EFTA), Austria, Finland, and Sweden, entered the EU-12 on January 1, 1995, making it the EU-15. By the year 2000 the present EU-15 could include 2 more EFTA countries (Norway and Switzerland) and 4 CEEC's (the Czech Republic, Hungary, Poland, and Slovakia, the CEEC-4), becoming the EU-21. An EU-21 would significantly affect the world's agricultural trading system under the present CAP.

Budgetary constraints in both the EU and the CEEC's probably will be a major obstacle to supporting agricultural policies in the EU for two reasons: compensation payments the EU agreed to pay farmers for reducing target prices and struggling fiscal budgets in the CEEC's. These budget constraints are particularly important in determining when and under what conditions the CEEC's will be integrated into the EU.

The new EU member countries (with the exception of Sweden) supported agriculture even more lavishly than the EU. Adoption of the CAP by these countries initially implied lower producer prices, suggesting lower production. Some of the EFTA countries changed their agricultural policies to adapt to the CAP in anticipation of EU membership or reformed their agricultural policies somewhat to adjust to budget realities.

These countries' populations and agricultural sectors are small compared with the EU, but, because of their high per capita income, they will be net contributors to the EU budget. Because of relatively low agricultural production levels, the newly integrated EFTA countries are not likely to negatively affect the CAP, but they could positively affect the agricultural sectors

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of other EU member states as consumers increase demand in response to lower EU prices.

The EU signed association agreements with 10 CEEC's and discussed future EU membership with them. Most of these 10 CEEC's have either applied for EU membership or signaled their intention to do so. During 1996 and through June 1997, the EU held intergovernmental conferences to determine the many institutional and constitutional changes that must be made to cope with both recent and future enlargements. These changes, needed to make an enlarged EU politically workable, could be decisive for the implementation of conditions determining the feasibility of the CEEC's membership.

This report documents the modeling framework European Simulation Model (ESIM) used to analyze the 1992 CAP reform and EU enlargement, as well as the effects on agricultural production, consumption, and trade of the major commodities of interest to the United States in an EU-15 and/or an EU-21 under various scenarios where countries are integrated into the CAP during different time periods. The model also explicitly measures budget costs and gross farm income annually by commodity and by country grouping. Results from this modeling exercise framed the enlargement issues and provided some of the first estimates of the magnitude of budget costs implied by eastward enlargement of the EU for the EU Commission (Tangermann and Josling).

Since the end of the modeling exercise, events in the grain and beef markets evolved much differently than was assumed in the scenarios. Specifically, world grain prices moved above EU intervention levels, and revelations of a possible link between bovine spongiform encephalopathy (BSE, or mad cow disease) and a related human brain ailment, Creutzfeldt-Jakob Disease, resulted in large declines in beef and veal consumption in the EU. The model's results do not capture these events, which, if considered as temporary aberrations rather than as representing persistent structural changes, do not alter the validity of the basic thrust of the results. The ESIM model is policy-driven and provides information on the effects of alternative policy scenarios, assuming "normal" weather and that factors not explicitly modeled main-

tain their longrun equilibrium levels. The results presented in this report indicate changes that could occur under various policy scenarios, assuming that world prices return to their historical pattern below those prevailing in the EU. While the delay in publication of this monograph makes some of the results in the early years dated, the conclusions drawn from the results in later years are quite applicable.

Scenarios

Five principal scenarios represent various EU enlargement possibilities in the analysis. The scenarios are cumulative in the sense that higher numbered scenarios subsume previous scenarios. The scenarios are as follows:

Base scenario: CAP reform is imposed on the EU.³

There is no enlargement and other countries (including the three EFTA countries that are now EU members) continue past policies. This scenario provides the baseline for evaluating the other four scenarios.

Scenario 1: Austria, Finland, and Sweden join the EU in 1995, making an EU-15.

Scenario 2: Norway and Switzerland join the EU-15 in 2000, leading to an EU of 17 countries.

Scenario 3: The four CEEC's included in the study, the Czech Republic, Hungary, Poland, and Slovakia, join the EU in 2000 to make a total of 21 countries.

Scenario 4: The CAP is further reformed in the period between 1995 and 2000 in order to "make room" for the new members.

Three additional mini-scenarios (**base-A**, **scenario 3a**, and **scenario 4a**) were analyzed. **Base-A** is the same as **base scenario** but with lower yield growth rates in the EU-12. **Scenario 3a** is the same as **scenario 3** with the important and feasible exceptions that the CEEC-4 do not receive compensation payments and are not required to set aside land. **Scenario 4a** is the same as **scenario 4**, except that the exogenously determined growth rate in crop yields (representing

³ CAP reform is not discussed at length because its provisions are well known. Briefly, CAP reform included reductions in the intervention price of grains, and the introduction of set-aside and compensation payments.

technological improvements) is reduced relative to the rate prevailing under the other scenarios. This scenario is predicated on the assumption that lower prices will lead to lower research and development expenditures, hence reducing improvements in yield-enhancing technologies. The combination of lower prices and lower yield growth is critical in forecasting whether the EU can meet GATT commitments with the current CAP.

Commodity Coverage, Budget Exposure, and Farm Revenues

Commodities covered in the model include individual grains, individual oilseeds and products, sugar, rice, dairy products, individual livestock products, and important feeds such as manioc and corn gluten feed, as well as proxy index variables for other energy-rich and protein-rich feeds. While the coverage is not comprehensive, the modeled commodities represent a significant share of world trade in agriculture and more than 50 percent of EU agricultural budget outlays.

Farm income and budget constraints play particularly important roles in the final shape of agricultural poli-

cies in Europe. Therefore, an analytical framework is used to capture the effects of policy changes on the major components of the CAP budget and on farm returns of the EU and countries that aspire to accede to the EU. The task for policymakers and for analysts is an arduous one in the sense that changes in the CAP and world price movements have effects on production, consumption, trade, farm income, and the budget—all of which must be reconciled with the internal political dynamics of a rapidly widening and, consequently, more politically and institutionally complex EU.

A comparative-static analytical framework with the capability of generating results on an annual basis is used to assess possible EU actions on agricultural policy. The outcomes of the various scenarios, from which implications are drawn for world agricultural trade, are examined for political feasibility. Some changes may have to be made to the CAP if stocks, farm incomes, budgets, or trade are unacceptable to EU farm ministers, farmers, consumers, the EU Commission, finance ministers, and WTO trade partners.